

CertiMaC
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R.I.RA,
partita iva e
codice fiscale
02200460398
R.E.A.RA
180280
capitale sociale
€ 60.000
interamente versato

Tests executed by

Ind. Tech. Germano Pederzoli

Ind. Tech. Federica Farina

Drawn up

Dr. Marco Marsigli

Approved

Eng. Martino Labanti

TEST REPORT

010113 - R - 1857

ANNEX TO THE CERTIFICATE OF CONFORMITY 015/10

PLACE AND DATE OF ISSUE: Faenza, 02/22/2010

COMPANY: **VE-VA S.p.A.**

FACTORY: Via Fornace Verni, 153
47842 San Giovanni in Marignano (RN)

TYPE OF PRODUCT: **Tegola Portoghese**
(tile with sidelock and headlock)

STANDARD APPLIED: UNI EN 1304, UNI EN 1024, UNI EN 538,
UNI EN 539-1, UNI EN 539-2

DECLARED VALUES:

LENGTH	407 mm
WIDTH	241 mm
CAMBER	0.0 mm
FIXING	Yes

SAMPLING DATE: 11/25/2009

TESTS EXECUTED: January-February 2010

TESTS EXECUTED AT: CertiMaC, Faenza

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Test	N. specimens	Results	Acceptance limits
Appearance and structure N. unsatisfactory specimens	100	0	≤ 5
Flexural strength Minimum breaking load Average breaking load Maximum breaking load Standard deviation	10	4.69 kN 5.40 kN 6.19 kN 0.48 kN	$F \geq 1.20 \text{ kN}$
Impermeability Maximum impermeability Average impermeability Category of impermeability	10	0.03 cm ³ cm ⁻² gg ⁻¹ 0.02 cm ³ cm ⁻² gg ⁻¹ 1	<u>Category 1</u> $IF \leq 0.60 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$ $\bar{IF} \leq 0.50 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$ <u>Category 2</u> $IF \leq 0.90 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$ $\bar{IF} \leq 0.80 \text{ cm}^3 \text{ cm}^{-2} \text{ gg}^{-1}$
Frost resistance, method C Appearance and structure Mass loss	10	satisfactory 0.0 %	satisfactory/unsatisfactory $\Delta M \leq 1.0 \%$
Individual dimensions: Length Average tolerance Minimum tolerance Maximum tolerance	10	- 0.6 % - 0.3 % - 0.7 %	$L_T \leq \pm 2.0 \%$
Individual dimensions: Width Average tolerance Minimum tolerance Maximum tolerance	10	- 0.5 % 0.0 % - 0.9 %	$I_T \leq \pm 2.0 \%$
Camber Average camber Minimum camber Maximum camber	10	0.5 % 0.2 % 0.7 %	$\bar{R}_L \leq 1.5 \%$
Twist Average twist Minimum twist Maximum twist	10	0.4 % 0.0 % 1.0 %	$C_p \leq 1.5 \%$